

# MONTHLY WEATHER REVIEW,

## APRIL, 1876.

WAR DEPARTMENT,

Office of the Chief Signal Officer,

DIVISION OF

TELEGRAMS AND REPORTS FOR THE BENEFIT OF COMMERCE AND AGRICULTURE.

### INTRODUCTION.

In compiling the present Review, the following data have been made use of, viz: The tri-daily charts, constructed from the simultaneous observations taken at one hundred and forty Signal Service stations, and fourteen Canadian stations, and telegraphed to this office immediately afterward; monthly meteorological records of observations, taken at four hundred and thirty-seven stations, including those from the civilian Voluntary Observers, U. S. Naval Hospitals, U. S. Army Posts, Canadian stations and Signal Service stations; reliable newspaper extracts; special reports from various sections of the country; and Marine Records.

The general features of the month were: (1.) The slight deficiency of temperature throughout the Atlantic States, the Lower Lakes and Canadian Provinces. (2.) The rarity of destructive storms, tornadoes, &c. (3.) The rarity of auroras. (4.) The large excess of rain-fall in the South Atlantic and Gulf States. (5.) The long-continued high water in the Mississippi between Cairo and Vicksburg, ending in the formation on the 26th of the cut-off at the latter place. (6.) The rarity of destructive frosts. (7.) The heavy snow-storm of the 4th and 5th in New England.

### BAROMETRIC PRESSURE.

The general distribution of atmospheric pressure for April is shown by the isobars upon Chart No. II, which exhibit characteristic differences as compared with the charts for April, 1874 and 1875. A comparatively low pressure is shown for April, 1876, in the Northwest, but about the same pressure in the South Atlantic and Eastern Gulf States, the Pacific coast and Nova Scotia, as compared with the two preceding years.

*Barometric Range.*—The barometric ranges, reduced to sea-level, have been as follows: Large ranges—Alpena 1.45 in., Bismarck 1.20, Buffalo 1.24, Breckenridge 1.23, Detroit 1.15, Escanaba 1.43, Grand Haven 1.15, Marquette 1.58, North Platte, Oswego and Pembina 1.20, Malone 1.26, Port Huron 1.22, Rochester 1.27. Small ranges—Jacksonville 0.52, New Orleans 0.46, Punta Rasa 0.37, San Diego 0.40, San Francisco 0.41.

*Areas of Low Barometer.*—In general, the tracks of the paths of the areas of low pressure have lain decidedly to the northward of those of 1874 and 1875. Three have passed eastward over the Atlantic States to the Gulf Stream. Ten have passed east-north-eastward over the Lake region; of these four moved southeastward to the southern boundary of Minnesota, and then turned to the east-north-east. But one of these has been attended by winds attaining the force of a gale on the Atlantic coast.

No. I.—This depression is (as No. VIII of the Review for March) traced back to the Pacific coast. It was on the 1st of April central in Texas, but appears as an insignificant depression until the 4th, when it had increased to a storm off the Middle Atlantic coast, which subsequently moved slowly northeastward over Nova Scotia. Northeasterly winds of from twenty-five to fifty miles were reported on the 4th and 5th on the Middle and East Atlantic coasts, and a heavy snow-fall occurred in New England.

No. II.—This may be considered as a branch of No. I, which was definitely formed on the morning of the 2d in Missouri. It moved thence northward into Minnesota, and then eastward over Lake Superior; light rains but no high winds were reported. Nos. I and II afford an excellent illustration of the fact that a slight deficiency of pressure over a large extent of territory, as, for instance, from the Gulf of Mexico to